Homework #1; Chapter 1. This homework has three parts (A, B, C). Each part will be separately graded.

Part A, HW #1, Ch #1.

Write short answer to each of the following four questions (answers can be handwritten).

1. Comment on the following statement:

   “Since the long-run AS-curve is vertical, we can conclude that the total real output of a nation cannot grow in the long run.”

2. True or false? Why?

   “There is always a clear tradeoff between unemployment and inflation.”

3. Comment on the following statement:

   “In the very short run real output is fixed, and therefore any increase in aggregate demand will simply increase the price level but not affect how many goods and services are produced in an economy.”
4. Comment on the following statement:

“In the two graphs below point A is indicative of macroeconomic equilibrium.”
Part B, HW #1, Ch #1.

(1) **Empirical problems**

- go to [www.economagic.com](http://www.economagic.com)
- click search
- enter “leading”
- find series
- select “U.S. Index of Leading Indicators”
- produce a GIF chart
- print this GIF chart
- attach this chart to HW#1
- predict the index for three months hence (i.e. April 2004)

(2) Pick one leading indicator from each of the following sectors and briefly state the rationale for including this indicator in the calculation of the index:

   (1) the labor sector
   (2) business activity
   (3) the financial sector
   (4) residential construction

Part C, HW #1, Ch 1.

MC Quiz, 25 questions, use red score sheet handed out in class or available outside Heady 281 or Heady 167.

We will use the following grading scale.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>20+</td>
</tr>
<tr>
<td>B</td>
<td>19, 18, 17</td>
</tr>
<tr>
<td>C</td>
<td>16, 15, 14</td>
</tr>
<tr>
<td>D</td>
<td>13, 12, 11</td>
</tr>
<tr>
<td>F</td>
<td>&lt; 11</td>
</tr>
</tbody>
</table>

1. In studying growth theory, we
   A) assume that labor, capital, and raw materials are all fully employed
   B) assume that increased use of inputs cannot lead to a higher living standard
   C) assume that technological advances cannot affect living standards
   D) try to explain the reasons for recessions and booms
   E) all of the above
2. Which of the following factors does NOT contribute to economic growth?
A) the availability of resources such as labor and capital
B) increases in the size of the production
C) the availability of new and better technology
D) increased knowledge gained through education or work experience
E) all of the above can increase economic growth

3. Government intervention into economic activity will NOT lead to a change in the price level in
A) the very short-run model
B) the medium-run model
C) the very long-run model
D) the classical model
E) a macro-model that focuses on the growth of productive capacity

4. In the very short run, the level of
A) output is determined by both aggregate demand and aggregate supply
B) output is determined by aggregate demand above
C) prices will change if aggregate demand shifts
D) prices is determined by aggregate demand alone
E) both A) and C)

5. In the simple macro model of this chapter, the long-run AS-curve is
A) horizontal
B) vertical
C) upward-sloping
D) assumed to be completely price elastic
E) either B) or C), depending on how fast prices adjust

6. In the very long-run AD-AS model,
A) only fiscal policy can affect both output and prices
B) only monetary policy can affect both output and prices
C) monetary policy can affect output but not prices
D) active stabilization policy is ineffective in changing output
E) the unemployment rate is always assumed to be zero

7. In the medium run, if GDP goes down but the price level goes up,
A) the AD-curve must have shifted to the right
B) the AD-curve must have shifted to the left
C) the AS-curve must have shifted to the right
D) the AS-curve must have shifted to the left
E) the AD-curve and the AS-curve must have both shifted to the right
8. The position of the AD-curve depends on
A) monetary and fiscal policies
B) the level of consumer confidence
C) the productive capacity of our economy
D) all of the above
E) only A) and B)

9. Nominal GDP is correctly defined as
A) the monetary value of all goods and services, final and intermediate, produced in a given year
B) the monetary value of all wealth that is accumulated in a given year
C) the national income minus all non-income charges against output
D) the monetary value of all final goods and services currently produced in our economy in a given year
E) the market value of all goods produced by domestically-owned resources in a given year

10. If nominal GDP, prices, and population all increase but real GDP remains the same then
A) real GDP per capita will decrease
B) real GDP per capita will increase
C) we cannot tell what will happen to real GDP per capita
D) the standard of living will increase
E) the standard of living will remain the same

11. Assume an economy that is currently at the full-employment level of output. If aggregate demand decreases, what should we expect?
A) a decrease in potential GDP and the price level
B) an increase in unemployment and the price level
C) a decrease in unemployment and the price level
D) an increase in unemployment and a decrease in the price level
E) a decrease in potential GDP and an increase in unemployment

12. Potential GDP is the value of GDP that can be calculated if we assume that
A) there are no measurement errors
B) the unemployment rate is zero
C) the inflation rate is zero
D) GDP has been adjusted for inflation
E) the capital stock is working at full capacity and we have full employment

13. The full-employment level of output is defined as
A) actual output plus the output gap
B) potential output plus the output gap
C) potential output minus the output gap
D) the level of output at a zero unemployment rate
E) both A) and D)
14. Which of the following is the most important variable for judging an economy’s long-run performance?
A) growth in nominal GDP
B) growth in real GDP
C) growth in real GDP per capita
D) growth in potential GDP
E) growth in the capital stock

15. Real GDP can grow over time because of
A) an increase in the amount of labor used in the production process
B) an increase in the capital stock
C) efficiency improvements
D) all of the above
E) only A) and B)

16. The average growth rate of real U.S. GDP per capita from 1913 to 1998 was about
A) 1.7 percent
B) 2.1 percent
C) 2.6 percent
D) 3.1 percent
E) 4.2 percent

17. The average growth rate of real U.S. GDP from 1960 to 2001 was about
A) 1.7 percent
B) 2.5 percent
C) 3.4 percent
D) 4.4 percent
E) 5.8 percent

18. The unemployment rate is defined as
A) the number of unemployed divided by total population
B) the number of people not looking for jobs divided by the labor force
C) the fraction of the labor force that cannot find jobs
D) the fraction of total population that cannot find jobs
E) total population minus the number of employed workers

19. Looking at how the rate of inflation and unemployment have behaved over the last three decades we can see that
A) unemployment and inflation have always increased together
B) unemployment has always increased when inflation decreased
C) there is no simple relationship between unemployment and inflation
D) low unemployment always implies high inflation
E) high unemployment always implies high inflation
20. The Phillips curve is often used to show the relationship between
A) the price level (index) and unemployment in a year
B) the rate of inflation and unemployment over time
C) employment and GDP
D) changes in GDP and the rate of inflation
E) unemployment and GDP growth

21. When the economy goes into a recession, we can generally expect that
A) inflation will decrease while output will increase
B) inflation will increase while unemployment will decrease
C) inflation and output will increase
D) inflation will decrease while unemployment will increase
E) none of the above

22. Looking at the performance of the U.S. economy over the last three decades we realize that
A) in the long run, the unemployment rate is largely independent of inflation
B) whenever the unemployment rate has increased, the inflation rate has decreased
C) whenever the inflation rate has decreased, the unemployment rate has also decreased
D) both inflation and unemployment have shown small variations, always moving in opposite
directions
E) neither unemployment nor inflation every exceeded 10 percent

23. The CPI is defined as
A) the cost-price index, measuring cost increases to producers
B) the cross-price index, measuring the increase in relative prices of two different inputs used in
the production process
C) a price index that measures the average price increase of all final goods and services
produced
D) a price index that measures the cost of a given market basket of intermediate goods and raw
materials
E) a price index that measures the cost of a market basket of goods representing the purchases of
a typical urban consumer

24. Since 1960 the U.S. inflation rate measured by the CPI has
A) increased at a steady rate
B) remained remarkably constant
C) fluctuated widely and always been positive
D) fluctuated widely and usually been positive although it has occasionally been negative
E) always increased as the unemployment rate has declined

25. Even small increases in the inflation rate add up. For example, how much would an item you
bought for $1.00 in 1960 have cost on average in 2002?
A) $3.22
B) $4.33
C) $5.15
D) $6.16
E) $9.69